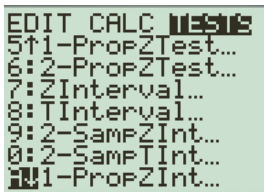
Confidence intervals in TI 83 & TI 84

1. Confidence interval for proportions:

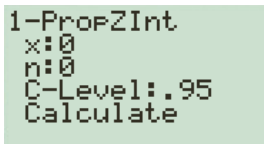
   Press STAT

   Choose TESTS, scroll down to 1-PropZInt:

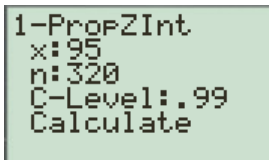
   a) 1-PropZInt… (This is confidence interval for proportions)



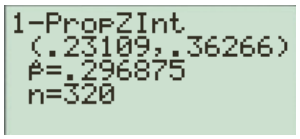
   b) Hit Enter:



   Update x, n and the confidence level. Example, for x=95, n=320, a 99% CI:



   The result is:

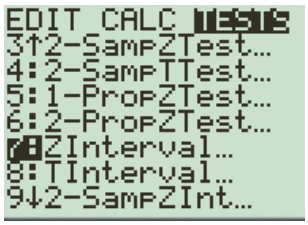


   Which is equivalent to $0.23109 \le p \le 0.36266$

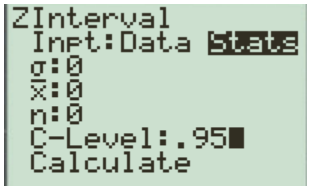
2. Confidence intervals for means.

   There are two types of intervals: when **σ** (sigma) is known, we use Z-Int; if **σ** is unknown (the sample standard deviation **s** is known and the distribution is approx Normal or the sample size is large enough, n>30) we use T-Int.

   a. For Z-Interval: STAT, then TEST, Choose ZInterval…



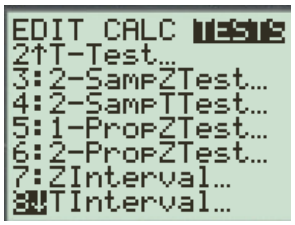
Press enter:



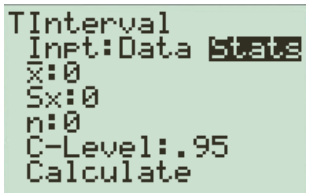
Choose Stats, hit enter and update the specific values of your problem, then Calculate.

b. For T-Interval:

STAT, TESTS, down to TInterval…

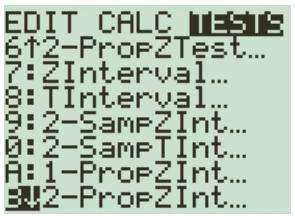


Update the specific values:

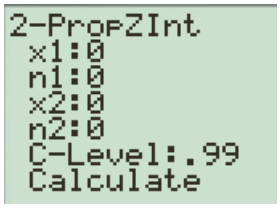


3. Two samples confidence intervals:

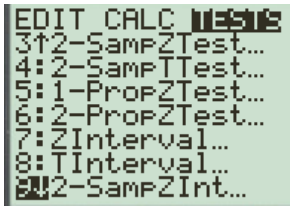
a. For proportions: STAT, TESTS, 2-PropZInt…



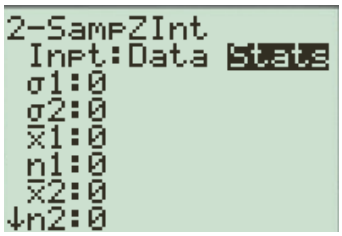
Update:



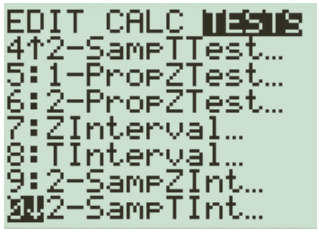
b. For two samples means: STAT, TESTS, 2-SampZInt… [Z, when **σ** (sigma) is known]:



Update the specific data:



c. Two samples means: STAT, TESTS, 2-SampTInt… [Z, when **σ** (sigma) is unknown; therefore, **s** is known]:



Input your data: